
ENVIRONMENTAL Fact Sheet



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Use of Lakes or Streams for Domestic Water Supply

A WORD OF CAUTION

The purpose of this fact sheet is to strongly caution against the use of surface water for drinking purposes. Surface waters include lakes, ponds, streams and some springs. Diseases commonly transmitted by contaminated surface water include cholera, typhoid and giardiasis.

Some residents and visitors think of New Hampshire as relatively rural and pristine and believe it is safe to use surface water for drinking. These people often are renting lakeside cottages or are camping, hunting or hiking. Regardless of the apparent safety of this practice in the past, drinking from ponds and streams is not safe and the DES strongly cautions against this practice.

Even though past bacterial tests for a particular pond or stream may have shown good quality, quick shifts in wind direction coupled with poor sanitary practices of man or feces from passing animals can quickly contaminate any surface water source. This rapid and uncontrollable change is the inherent weakness of a surface water.

While it is true that some municipalities take water from lakes or rivers for domestic use, sophisticated filtration and/or chlorination systems are always required. In addition, most lake waters used as a source of municipal water supply have restrictions on fishing, swimming, and boating activities, thus restricting the presence of man and lowering potential contamination. In addition they are sampled daily.

PRIVATELY OPERATED TREATMENT ISN'T SUFFICIENT

Although equipment is available which enables an individual to treat his/her water, the DES does not recommend its use for an individual surface water supply for the following reasons:

1. There are usually no restrictions on activities in the vicinity of the intake pipe.
2. Testing by individuals is usually sporadic, and it's doubtful whether sufficient samples would be processed to regularly determine the water's quality.
3. Sufficient mixing time between the chlorine and water is seldom available to ensure adequate bacteria and virus kill. Further some organisms such as giardiasis or cryptosporidium are highly resistant to chlorine disinfection.

4. Most people are not skilled in the proper operation or repair of treatment equipment.

ALTERNATE WATER SOURCES

Instead of surface water, DES recommends the use of a dug, point or drilled well. Design sketches showing these types of water supply wells can be obtained by contacting the DES Water Supply Engineering Bureau at 271-3139.

FOR ADDITIONAL INFORMATION

For additional information please call DES at 271-3139. We would appreciate your comments concerning this fact sheet.